

EXPLANATION

Depth (feet)	Depth (meters)	Description
0 - 26	0 - 7.9	CLAY, locally micaceous
26 - 30	7.9 - 9.1	CLAY, moderate-yellowish-brown (10YR 5/4), calcareous, with occasional scattered mica plates as much as 0.5 mm (0.02 in.) across. Clay oxidizes moderate-yellowish-brown (10YR 5/4) or dark-yellowish-brown (10YR 4/2)
30 - 31	9.1 - 9.4	CLAY, dusky-yellow (5Y 6/4), calcareous. Clay oxidizes to moderate-yellowish-brown (10YR 5/4)
31 - 34.5	9.4 - 10.5	CLAY, moderate-yellowish-brown (10YR 5/4), calcareous. Clay oxidizes light-olive-gray (5Y 5/2) to moderate-olive-brown (5Y 4/4)
34.5 - 36	10.5 - 11.0	CLAY, dark-greenish-gray (5GY 4/1), with scattered mica plates as much as 0.5 mm (0.02 in.) across. Clay oxidizes light-olive-gray (5Y 5/2) to moderate-olive-brown (5Y 4/4)
36 - 40	11.0 - 12.2	CLAY, dark-gray (N 3), calcareous. Clay oxidizes olive-gray (5Y 5/2) to moderate-yellowish-brown (10YR 5/4)
40 - 42	12.2 - 12.8	CLAY, greenish-black (5GY 2/1), calcareous, with less than 1 percent scattered mica plates as much as 0.5 mm (0.02 in.) across. Clay oxidizes grayish-olive (10Y 4/2)
42 - 45	12.8 - 13.7	CLAY, black (N 1), calcareous. Clay oxidizes grayish-olive (10Y 4/2)
45 - 61	13.7 - 18.6	CLAY, greenish-black (5GY 2/1), calcareous, with scattered mica plates as much as 0.5 mm (0.02 in.) across. Clay oxidizes grayish-olive (10Y 4/2)
61 - 65	18.6 - 19.8	CLAY, dark-gray (N 3), calcareous. Clay oxidizes grayish-olive (10Y 4/2)
65 - 74	19.8 - 22.6	CLAY, black (N 1), calcareous, with occasional thin greenish-gray (5G 6/1) clay laminae as much as 1 mm (0.4 in.) thick. Clay oxidizes grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
74 - 93	22.6 - 28.3	CLAY, interbedded, black (N 1) and greenish-gray (5G 6/1), calcareous. Black beds as much as 6.3 mm (0.25 in.) thick and gray beds as much as 1.6 mm (0.06 in.) thick. Clay oxidizes to grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
93 - 95	28.3 - 28.9	CLAY, dark-greenish-gray (5GY 4/1), calcareous, with scattered mica plates. Clay oxidizes to grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
95 - 99	28.9 - 30.2	CLAY, interbedded, black (N 1) and dark-greenish-gray (5GY 4/1), calcareous, slightly micaceous, laminae less than 1.6 mm (0.06 in.) thick. Clay oxidizes to grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
99 - 101	30.2 - 30.8	CLAY, greenish-gray (5G 6/1), calcareous. Clay oxidizes to grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
101 - 105	30.8 - 32.0	CLAY, greenish-black (5G 2/1), calcareous. Clay oxidizes to grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
105 - 116	32.0 - 35.4	CLAY, black (N 1), calcareous, with scattered mica plates. Clay oxidizes grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
116 - 121.5	35.4 - 37.0	CLAY, interbedded, black (N 1) and greenish-gray (5GY 6/1) layers as much as 6.3 mm (0.25 in.) thick. Clay oxidizes grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
121.5 - 123	37.0 - 37.5	CLAY, dark-greenish-gray (5GY 4/1), calcareous. Clay oxidizes to grayish-olive (10Y 4/2), with minor pale-greenish-yellow (10Y 8/2)
123 - 125	37.5 - 38.1	CLAY, interbedded, black (N 1) and dark-greenish-gray (5GY 4/1). Clay oxidizes to grayish-olive (10Y 4/2) with minor pale-greenish-yellow (10Y 8/2)
125 - 130	38.1 - 39.6	CLAY, dark-greenish-gray (5GY 4/1), calcareous. Clay oxidizes to grayish-olive (10Y 4/2), with minor pale-greenish-yellow (10Y 8/2)
130 - 139	39.6 - 42.4	CLAY, greenish-gray (5GY 6/1), calcareous, with occasional plates of mica. Clay oxidizes to grayish-olive (10Y 4/2)
139 - 140	42.4 - 42.7	CLAY, interbedded, black (N 1) and greenish-gray (5GY 6/1), calcareous, with scattered mica plates. Clay oxidizes to grayish-olive (10Y 4/2)
140 - 142	42.7 - 43.3	CLAY, lithology similar to 42.4 - 42.7 m (139 - 140 ft), but contains only occasional greenish-gray (5GY 6/1) laminae that are less than 1 mm (0.04 in.) thick. Clay oxidizes grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
142 - 143	43.3 - 43.6	CLAY, greenish-gray (5GY 6/1), calcareous. Clay oxidizes grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
143 - 150	43.6 - 45.7	CLAY, interbedded, black (N 1) and greenish-gray (5GY 6/1), calcareous, with scattered mica plates. Clay oxidizes light-olive-brown (5Y 5/6), grayish-olive (10Y 4/2), and moderate-olive-brown (5Y 4/4)
150 - 154	45.7 - 46.9	CLAY, black (N 1), calcareous, micaceous. Clay oxidizes dusky-yellow-green (5GY 5/2) with minor moderate-olive-brown (5Y 4/4)
154 - 157	46.9 - 47.9	CLAY, greenish-gray (5GY 6/1), calcareous, with some scattered mica plates as much as 6.3 mm (0.02 in.) across. Clay oxidizes dusky-yellow-green (5GY 5/2)
157 - 158	47.9 - 48.2	CLAY, lithology similar to 46.9 - 47.9 m (154 - 157 ft), but with interbeds of black (N 1) clay as much as 50.8 mm (2 in.) thick. Clay oxidizes dusky-yellow-green (5GY 5/2)
158 - 160	48.2 - 48.8	CLAY, same lithology as 46.9 - 47.9 m (154 - 157 ft). Clay oxidizes dusky yellow-green (5GY 5/2)
160 - 166	48.8 - 50.6	CLAY, greenish-black (5G 2/1), calcareous, with scattered mica plates. Clay oxidizes dusky-yellow-green (5GY 5/2)
166 - 171	50.6 - 52.1	CLAY, black (N 1), calcareous. Clay oxidizes dusky-yellow-green (5GY 5/2) to light-olive-brown (5Y 5/6)
171 - 183	52.1 - 55.8	CLAY, grayish-olive (10Y 4/2), calcareous, micaceous. Clay oxidizes light-olive-gray (5Y 5/2), grayish-olive (10Y 4/2), or moderate olive-brown (5Y 4/4)
183 - 184	55.8 - 56.1	CLAY, black (N 1). Clay oxidizes grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
184 - 185	56.1 - 56.4	CLAY, grayish-olive (10Y 4/2). Clay oxidizes grayish-olive (10Y 4/2) to moderate olive-brown (5Y 4/4)
185 - 189	56.4 - 57.6	CLAY, black (N 1), calcareous. Clay oxidizes grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
189 - 190	57.6 - 57.9	CLAY, dark-greenish-gray (5GY 4/1). Clay oxidizes grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
190 - 192	57.9 - 58.5	CLAY, same lithology as 56.4 - 57.6 m (185 - 189 ft). Clay oxidizes grayish-olive (10Y 4/2) to moderate-olive-brown (5Y 4/4)
192 - 196	58.5 - 59.7	CLAY, moderate-olive-brown (5Y 4/4), calcareous, micaceous. Unit changes to light-olive-gray (5Y 6/1) clay, with interbeds of light-olive-gray (5Y 6/1) tuff (?) as much as 12.7 mm (0.5 in.) thick near base. Clay oxidizes grayish-olive (10Y 4/2) to moderate olive-brown (5Y 4/4)
196 - 196.3	59.7 - 59.8	TUFF, light-olive-gray (5Y 6/1), very fine-grained, with scattered biotite plates as much as 0.

Map of California showing the location of the study area in the southeastern desert region. The map includes a grid of 36 numbered cells (31 to 36) with a shaded area labeled "KOEHN TO DRY-LAKE". The map also includes a north arrow, a scale bar (0 to 1 mile, 0 to 1 kilometer), and coordinates (R. 38 E., R. 39 E., T. 29 S., T. 30 S.).

TEST WELL LOCATION

X-3 Latitude: 35° 18' 22" N.
 Longitude: 117° 53' 19" W.
 SW1/4 NW1/4 SE1/4 sec. 22, T. 30 S., R. 38 E.
 Mount Diablo Meridian

This report has not been edited for
conformity with Geological Survey editorial standards

By Roger D. Dockter

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